OIPE JC161
APR 12 2004
PATENT & TRADEMARK OFFICE

TRANSMITTAL LETTER			Case No. 11127/6
Serial No. 10/682,427	Filing Date October 8, 2004	Examiner Not Assigned	Group Art Unit Not Assigned
Inventor(s) IMPERIALI ET AL.			
Title of Invention FLUORESCENCE ASSAY FOR KINASE ACTIVITY			

TO THE COMMISSIONER FOR PATENTS

Transmitted herewith is Information Disclosure Statement (in dup.), PTO 1449, 16 cited other art references, and return post card.

☐ Small entity status of this application under 37 CFR § 1.27 has been established by verified statement previously submitted.

☐ Applicant claims small entity status. See 37 CFR1.27.

☐ Petition for a ______month extension of time.

☒ No additional fee is required.

☐ The fee has been calculated as shown below:

	Claims Remaining After Amendment		Highest No. Previously Paid For	Present Extra
Total		Minus		
Indep.		Minus		
First Presentation of Multiple Dep. Claim				

Small Entity

Rate	Add'l Fee
x $9 =	
x 43 =	
+ $145 =	
Total add'l fee	$

or

Other Than Small Entity

Rate	Add'l Fee
x $18 =	
x $86 =	
+ $290 =	
Total add'l fee	$

☐ Please charge Deposit Account No. 23-1925 (BRINKS HOFER GILSON & LIONE) in the amount of $______. A duplicate copy of this sheet is enclosed.

☐ A check in the amount of $______ to cover the filing fee is enclosed.

☒ The Commissioner is hereby authorized to charge payment of any additional filing fees required under 37 CFR § 1.16 and any patent application processing fees under 37 CFR § 1.17 associated with this communication or credit any overpayment to Deposit Account No. 23-1925. A duplicate copy of this sheet is enclosed.

☒ I hereby petition under 37 CFR § 1.136(a) for any extension of time required to ensure that this paper is timely filed. Please charge any associated fees which have not otherwise been paid to Deposit Account No. 23-1925. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

S. Mrksich
K. Shannon Mrksich
Registration No. 36,675
Attorney for Applicant
Customer No. 00757 - Brinks Hofer Gilson Lione

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, ILLINOIS 60610
(312) 321-4200

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on April 6, 2004.

Date: 4-6-05

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope, with sufficient postage, addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on

April 6, 2004
Date of Deposit

K. Shannon Mrksich~~, Ph.D~~.
Name of Applicant, Assignee or
Registered Representative

S. Mrksich
Signature

4·6·04
Date of Signature

Our Case No.: 11127/6

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Imperiali et al.

Serial No.: 10/681,427

Filing Date: October 8, 2004

For: FLUORESCENCE ASSAY FOR KINASE ACTIVITY

Examiner: Not Assigned

Group Art Unit No.:

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
Alexandria, VA 22313-1450

Dear Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed below and on the attached Form PTO-1449 be considered by the Examiner and made of record. Copies of the listed documents required by 37 C.F.R. § 1.98(a)(2) are enclosed for the convenience of the Examiner.

The references now cited are the following:

OTHER DOCUMENTS

1. Chien-An, C. et al., “Biosensors of Protein Kinase Action: From In Vitro Assays to Living Cells”, *Biochimica et Biophysica Acta*, 1697, pp. 39-51, 2004.

2. Chien-An, C. et al., “Design and Synthesis of a Fluorescent Reporter of Protein Kinase Activity”, *J. Am. Chem. Soc.*, 124, pp. 3840-3841, 2002.

3. Higashi, H. et al., “Imaging of cAMP-Dependent Protein Kinase Activity in Living Neural Cells Using a Novel Fluorescent Substrate”, *FEBS Letters*, 414, pp. 55-60, 1997.

4. Hofmann, R.M. et al., “Fluorescent Monitoring of Kinase Activity in Real Time: Development of a Robust Fluorescence-Based Assay for Abl Tyrosine Kinase Activity”, *Bioorganic & Medicinal Chemistry Letters*, 11, pp. 3091-3094, 2001.

5. Kurokawa, K. et al., “A Pair of Fluorescent Resonance Energy Transfer-Based Probes for Tyrosine Phosphorylation of the CrkII Adaptor Protein *in Vivo*”, *The Journal of Biological Chemistry*, 276, No. 33, pp. 31305-31310, 2001.

6. Lawrence, D., “Chemical Probes of Signal-Transducing Proteins”, *Acc. Chem. Res.*, 36, pp. 401-409, 2003.

7. McIlroy, B. K. et al., “A Continuous Fluorescence Assay for Protein Kinase C”, *Analytical Biochemistry*, 195, pp. 148-152, 1991.

8. Nagai, Y. et al., "A Fluorescent Indicator for Visualizing cAMP-Induced Phosphorylation in Vivo", *Nature America Inc.*, 18, pp. 313-316, 2000.

9. Post, P. et al., "A Genetically Engineered, Protein-Based Optical Biosensor of Myosin II Regulatory Light Chain Phosphorylation", *The Journal of Biological Chemistry*, 269 No. 17, pp. 12880-12887, 1994.

10. Sato, M. et al., "Fluorescent Indicators for Imaging Protein Phosphorylation in Single Living Cells", *Nature Biotechnology*, 20, pp. 287-294, 2002.

11. Shults, M.D. et al., "Versatile Fluorescence Probes of Protein Kinase Activity", *J. Am. Chem. Soc.*, 125, pp. 14284-14249, 2003.

12. Ting, A. Y. et al., "Genetically Encoded Fluorescent Reporters of Protein Tyrosine Kinase Activities in Living Cells", *PNAS*, 98, No. 26, pp. 15003-15008, 2001.

13. Violin, J.D. et al., "A Genetically Encoded Fluorescent Reporter Reveals Oscillatory Phosphorylation by Protein Kinase C", *The Journal of Cell Biology*, 161, No. 5, pp. 899-909, 2003.

14. Wright, D. E. et al., "Fluorometric Assay for Adenosine $3^{\prime}$,$5^{\prime}$-Cyclic Monophosphate-Dependent Protein Kinase and Phosphoprotein Phosphatase Activities", *Proceedings of the National Academy of Sciences of the United States of America*, 78, No. 10, pp. 6048-6050, 1981.

15. Yeh, R. et al., "Real Time Visualization of Protein Kinase Activity in Living Cells", *The Journal of Biological Chemistry*, 277 No. 13, pp. 11527-11532, 2002.

16. Zhang, J. et al., "Genetically Encoded Reporters of Protein Kinase A Activity Reveal Impact of Substrate Tethering", *PNAS*, 98, No. 26, pp. 14997-15002, 2001.

In accordance with 37 C.F.R. § 1.97(g),(h), this Information Disclosure Statement is not to be construed as a representation that a search has been made and is not to be construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

This Information Disclosure Statement is being filed prior to the receipt of the first Official Action reflecting an examination on the merits and hence is believed to be timely filed in accordance with 37 C.F.R. § 1.97(b). No fees are believed to be due in connection with filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to these material, the Commissioner is hereby authorized to deduct said fees from Brinks Hofer Gilson & Lione Deposit Account No. 23-1925. A duplicate copy of this document is enclosed.

Applicants respectfully request that the listed documents be made of record in the present case.

Respectfully submitted,

S. Mrksich

K. Shannon Mrksich, Ph.D.
Registration No. 36,675
Attorney for Applicants

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FORM PTO-1449	SERIAL NO. 10/681,427	CASE NO. 11127/6
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	FILING DATE October 8, 2004	GROUP ART UNIT
(use several sheets if necessary)	APPLICANT(S): Imperiali et al.	

REFERENCE DESIGNATION **U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER Number-Kind Code (if known)	DATE	NAME	CLASS/ SUBCLASS	FILING DATE

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER Number-Kind Code (if known)	DATE	COUNTRY	CLASS/ SUBCLASS	TRANSLATION YES OR NO

EXAMINER INITIAL		**OTHER ART – NON PATENT LITERATURE DOCUMENTS** (Include name of author, title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published.
	A1	Chien-An, C. et al., "Biosensors of Protein Kinase Action: From In Vitro Assays to Living Cells", *Biochimica et Biophysica Acta*, 1697, pp. 39-51, 2004.
	A2	Chien-An, C. et al., "Design and Synthesis of a Fluorescent Reporter of Protein Kinase Activity", *J. Am. Chem. Soc.*, 124, pp. 3840-3841, 2002.
	A3	Higashi, H. et al., "Imaging of cAMP-Dependent Protein Kinase Activity in Living Neural Cells Using a Novel Fluorescent Substrate", *FEBS Letters*, 414, pp. 55-60, 1997.
	A4	Hofmann, R.M. et al., "Fluorescent Monitoring of Kinase Activity in Real Time: Development of a Robust Fluorescence-Based Assay for Abl Tyrosine Kinase Activity", *Bioorganic & Medicinal Chemistry Letters*, 11, pp. 3091-3094, 2001.
	A5	Kurokawa, K. et al., "A Pair of Fluorescent Resonance Energy Transfer-Based Probes for Tyrosine Phosphorylation of the CrkII Adaptor Protein *in Vivo*", *The Journal of Biological Chemistry*, 276, No. 33, pp. 31305-31310, 2001.
	A6	Lawrence, D., "Chemical Probes of Signal-Transducing Proteins", *Acc. Chem. Res.*, 36, pp. 401-409, 2003.
	A7	McIlroy, B. K. et al., "A Continuous Fluorescence Assay for Protein Kinase C", *Analytical Biochemistry*, 195, pp. 148-152, 1991.
	A8	Nagai, Y. et al., "A Fluorescent Indicator for Visualizing cAMP-Induced Phosphorylation in Vivo", *Nature America Inc.*, 18, pp. 313-316, 2000.
	A9	Post, P. et al., "A Genetically Engineered, Protein-Based Optical Biosensor of Myosin II Regulatory Light Chain Phosphorylation", *The Journal of Biological Chemistry*, 269 No. 17, pp. 12880-12887, 1994.
	A10	Sato, M. et al., "Fluorescent Indicators for Imaging Protein Phosphorylation in Single Living Cells", *Nature Biotechnology*, 20, pp. 287-294, 2002.
	A11	Shults, M.D. et al., "Versatile Fluorescence Probes of Protein Kinase Activity", *J. Am. Chem. Soc.*, 125, pp. 14284-14249, 2003.
	A12	Ting, A. Y. et al., "Genetically Encoded Fluorescent Reporters of Protein Tyrosine Kinase Activities in Living Cells", *PNAS*, 98, No. 26, pp. 15003-15008, 2001.

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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EXAMINER INITIAL	**OTHER ART – NON PATENT LITERATURE DOCUMENTS** (Include name of author, title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published.	
	A13	Violin, J.D. et al., "A Genetically Encoded Fluorescent Reporter Reveals Oscillatory Phosphorylation by Protein Kinase C", *The Journal of Cell Biology*, 161, No. 5, pp. 899-909, 2003.
	A14	Wright, D. E. et al., "Fluorometric Assay for Adenosine $3^{\prime}$,$5^{\prime}$-Cyclic Monophosphate-Dependent Protein Kinase and Phosphoprotein Phosphatase Activities", *Proceedings of the National Academy of Sciences of the United States of America*, 78, No. 10, pp. 6048-6050, 1981.
	A15	Yeh, R. et al., "Real Time Visualization of Protein Kinase Activity in Living Cells", *The Journal of Biological Chemistry*, 277 No. 13, pp. 11527-11532, 2002.
	A16	Zhang, J. et al., "Genetically Encoded Reporters of Protein Kinase A Activity Reveal Impact of Substrate Tethering", *PNAS*, 98, No. 26, pp. 14997-15002, 2001.

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